IN THE CLAIMS

115. (Amended) A method comprising the steps of:

forming a composition including copper, oxygen and [any] an element selected from the group consisting of at least one Group II A element and at least one element selected from the group consisting of a rare earth element and a Group III B element, where said composition is a mixed copper oxide having a non-stoichiometric amount of oxygen therein and exhibiting a superconducting state at a temperature greater than 26°K;

maintaining said composition in said superconducting state at a temperature greater than 26°K; and

passing an electrical current through said composition while said composition is in said superconducting state.

120. (Amended) A method comprising the steps of:

forming a composition including a transition metal, oxygen and [any] an element selected from the group consisting of at least one Group II A element and at least one element selected from the group consisting of a rare earth element and a Group III B element, where said composition is a mixed transitional metal oxide formed from said transition metal and said oxygen, said mixed transition metal oxide having a non-stoichiometric amount of oxygen therein and exhibiting a superconducting state at a temperature greater than 26°K;

maintaining said composition in said superconducting state at a temperature greater than 26°K; and

passing an electrical current through said composition while said composition is in said superconducting state.

123. (Amended) A superconductive method for conducting an electric current

essentially without resistive losses, comprising:

(a) providing a superconductor element made of a superconductive composition, the superconductive composition consisting

essentially of a transition metal-oxide compound having a layer-type perovskite-like crystal structure, the transition metal-oxide compound including at least one element selected from the group consisting of a Group II A element and at least one element selected from the group consisting of a rare earth element and a Group III B element, the composition having a superconductive/resistive transition defining a superconductive/resistive-transition temperature range between an upper limit defined by a transition-onset temperature [T] T_c and a lower limit defined by an effectively-zero-bulk-resistivity intercept temperature $T_{\rho=0}$, the transition-onset temperature T_c being greater than 26°K;

(b) maintaining the superconductor element at a temperature below the effectively-zero-bulk-resistivity intercept temperature $T_{\rho=0}$ of the superconductive composition; and

(c) causing an electric current to flow in the superconductor

N3

element.

129. (Amended) A method comprising providing a composition having a transition temperature greater than 26°K, the composition including a rare earth or alkaline earth element, a transition metal element capable of exhibiting multivalent states and oxygen, including at least one phase that exhibits superconductivity at temperature in excess of 26°K, maintaining said composition at said temperature to exhibit said superconductivity and passing an electrical superconducting current through said composition [while] with said phase exhibiting said superconductivity.

N4

130. (Amended). A method comprising providing a superconducting transition metal oxide having a superconductive onset temperature greater than 26°K, maintaining said superconducting transition metal oxide [being] at a temperature less than

said superconducting onset temperature and flowing a superconducting current therein.

131. (Amended). A method comprising providing a superconducting copper

oxide having a superconductive onset temperature greater than 26°K, [maintaing] maintaining said superconducting copper oxide at a temperature less than said superconducting onset temperature and flowing a superconducting current [therein] in said superconducting oxide.

132. (Amended) . A method comprising providing a superconducting oxide composition having a superconductive onset temperature greater than 26°K, maintaining said superconducting copper oxide at a temperature less than said superconducting onset temperature and flowing a [superconduting] superconducting current therein, said composition comprising at least one each of rare earth, an alkaline earth, and copper.

N4

133. (Amended). A method comprising providing a superconducting oxide composition having a superconductive onset temperature greater than 26°K, [maintianing] maintaining said superconducting copper oxide at a temperature less than said superconducting onset temperature and flowing a superconducting electrical current therein, said composition comprising at least one each of a Group III B element, an alkaline earth, and copper.

134. (Amended) A method comprising flowing a superconducting electrical current in a transition metal oxide having a T_c greater than 26°K and

maintianing said transition metal oxide at a temperature less than said T_c.

N4

135. (Amended) A method comprising flowing a superconducting electrical current in a copper oxide having a T_c greater than 26°K and maintianing said copper oxide at a temperature less than said T_c.

137. (Amended) A method comprising flowing a superconducting electrical current in a composition of matter having a T_c greater than 26°K, said composition comprising at least one each of a III B element, an alkaline earth, and copper oxide and maintianing said composition of matter at a temperature less than said T_c.

N5

138. (Amended) A method comprising flowing a superconducting electrical current in a composition of matter having a T_c greater than 26°K, said composition comprising at least one each of a rare earth, alkaline earth, and copper oxide and maintianing said composition of matter at a temperature less than said T_c.

139. (Amended) A method comprising flowing a superconducting electrical current in a composition of matter having a T_c greater than 26°K, said composition comprising at least one each of a rare

earth, and copper oxide and maintianing said composition of matter at a temperature less than said T_c.

140. (Amended) A method comprising flowing a superconducting elecrical current in a composition of matter having a T_c greater than 26°K carrying, said composition comprising at least one each of a III B element, and copper oxide and maintianing said composition of matter at a temperature less than said T_c.

N5

141. (Amended) A method comprising flowing a superconducting electrical current in a transition metal oxide comprising a T_c>26°K and maintaining said transition metal oxide at a temperature less than said T_c.

142. (Amended) A method comprising flowing a superconducting electrical current in a copper oxide composition of matter comprising a T_c>26°K and maintianing said copper oxide composition of matter at a temperature less than said [TC] T_c.

~~Added claims:~~

REMARKS